WHAT IS CLAIMED IS:

1. A flat panel display comprising:

a front glass plate;

a rear glass plate;

a layer of liquid crystals interposed between said front and glass plates;

a black mask EMI layer interposed between said front and rear glass plates and wherein said black mask EMI layer is electrically tied to zero potential and isolated from Vcom; and

a TFT array layer interposed between said front and rear glass plates.

2. A flat panel display according to claim 1, further comprising:

an insulating dielectric layer interposed between the inside surfaces of said front and glass plates.

3. A flat panel display according to claim 1, further comprising:

a metal heater layer integral to the TFT array layer.

4. A flat panel display according to claim 3, wherein said metal heater layer is patterned onto said TFT array layer.

5. A flat panel display according to claim 3, wherein said metal heater layer is behind said black mask EMI layer.

6. A flat panel display according to claim 5, wherein said metal heater layer is optically hidden from view behind said black mask EMI layer.

7. A flat panel display according to claim 3, wherein said metal heater layer is comprise of a grid of intersecting horizontal and vertical lines.

8. A flat panel display according to claim 3, further comprising of an insulating dielectric over-coated onto said metal heater layer.

9. A flat panel display according to claim 1, further comprising thermal sensors integral to said TFT array layer.

10. A flat panel display according to claim 9, wherein said thermal sensors are comprised of an array of diodes.

11. A flat panel display according to claim 9, wherein said thermal sensors are interposed between said front and rear glass plates to provide timely temperature sensing of said liquid crystal layer.

12. A flat panel display comprising:

a front glass plate;

a rear glass plate;

a layer of liquid crystals interposed between said front and glass plates;

a TFT array layer interposed between said front and rear glass plates;

a metal heater layer integral to said TFT array layer.

13. A flat panel display according to claim 12, wherein said metal heater layer is patterned onto said TFT array layer.

14. A flat panel display according to claim 12, wherein said metal heater layer is comprised of a grid of intersecting horizontal and vertical lines.

15. A flat panel display according to claim 12, wherein said metal heater layer is interposed between said front and rear glass plates to allow faster heating of said layer of liquid crystals.

16. A flat panel display according to claim 12, further comprising:

a black mask EMI layer interposed between said front and rear glass plates and wherein said black mask EMI layer is electrically tied to zero potential and isolated from Vcom.

17. A flat panel display according to claim 16, wherein said metal heater layer is hidden from view behind said black mask EMI layer.

18. A flat panel display comprising:

a front glass plate;

a rear glass plate;

a layer of liquid crystals interposed between said front and glass plates;

a TFT array layer interposed between said front and rear glass plates;

at least one thermal sensor integral to said TFT array layer.

19. A flat panel display according to claim 18, wherein said thermal sensor is applied onto said TFT array layer.

20. A flat panel display according to claim 18, wherein said at least one thermal sensor is comprised of an array of diodes.

21. A flat panel display according to claim 18, wherein said at least one thermal sensor is interposed between said front and rear glass plates to provide timely temperature sensing of said layer of liquid crystals.